

ABSTRACT OF THE DISCLOSURE

An agent may be coupled to receive a clock signal associated with the bus, and
5 may be configured to drive a signal responsive to a first edge (rising or falling) of the
clock signal and to sample signals responsive to the second edge. The sampled signals
may be evaluated to allow for the driving of a signal on the next occurring first edge of
the clock signal. By using the first edge to drive signals and the second edge to sample
signals, the amount of time dedicated for signal propagation may be one half clock cycle.
10 Bandwidth and/or latency may be positively influenced. In some embodiments, protocols
which may require multiple clock cycles on other buses may be completed in fewer clock
cycles. For example, certain protocols which may require two clock cycles may be
completed in one clock cycle. In one specific implementation, for example, arbitration
may be completed in one clock cycle. Request signals may be driven responsive to the
15 first edge of the clock signal and sampled responsive to the second edge. The sampled
signals may be evaluated to determine an arbitration winner, which may drive the bus
responsive to the next occurrence of the first edge.